



# Environmentally Preferable Product Report

## Recycling Fluorescent Lamps

Hazardous Waste and Toxics Reduction Program

### Fluorescent lamps are recommended, but they must be recycled.

Fluorescent lights are highly energy efficient. Lighting accounts for 30% to 50% of energy used in most buildings. Using fluorescent lights greatly reduces energy consumption and saves money. Fluorescent lamps, or light bulbs, are recommended for all state facilities.

*The importance of recycling fluorescent lamps cannot be understated.* All fluorescent lamps contain mercury. Mercury is a highly toxic metal which must be contained and properly managed. In 2004, Governor Locke issued Directive 04-01 instructing state agencies and institutions “to recycle all fluorescent lamps and bulbs at the end of their useful life.”

### Mercury and Human Health

Mercury is an extremely dangerous neurotoxin, affecting the brain, spinal cord, kidneys, and liver, causing irreversible health damage. The U.S. Centers for Disease Control and Prevention reported that up to one in 10 women in the United States carry enough mercury in their blood to pose a threat of neurological damage to a developing fetus.

Fish consumption is the most common route of mercury exposure. For more information on prevention of mercury-related risks, including fish-consumption recommendations, visit Washington’s

Department of Health mercury Web page: [www.doh.wa.gov/ehp/mercury](http://www.doh.wa.gov/ehp/mercury).

In Washington State, 437 - 575 pounds of mercury are released in the environment each year from improper disposal of fluorescent lamps.

One gram of mercury is enough to poison a one-acre lake to the point where the fish would become unfit to eat.

### Managing Mercury in Lamps

Although a single fluorescent lamp contains a relatively small amount of mercury, it is important that all lamp users recycle expired lamps to prevent cumulative effects of improper mercury disposal. According to the *Journal of the Air & Waste Management Association*, in the U.S., 2 to 4 tons of mercury are released annually from the disposal of approximately 620 million fluorescent lamps. When disposed of properly, mercury is captured through extraction techniques and reused in other manufacturing processes.

Take care not to break the lamps when collecting for recycling. For more information on lamp recycling, see the Department of Ecology’s Web site at [www.ecy.wa.gov/mercury/lamps](http://www.ecy.wa.gov/mercury/lamps).

### Bulbs Containing Mercury that Need to be Recycled

- Fluorescents-- Linear straight tubes, U-shaped, circular, and compact lamps
- Green or “low-mercury” lamps
- High Intensity Discharge Bulbs (HID)— often used for outdoor lighting
- Neon bulbs
- Ultraviolet bulbs— often used to disinfect drinking water.

Fluorescent lamps, high intensity discharge lamps, and even “low-mercury” lamps that are not recycled must be treated as hazardous waste.

## .For Further Information

### State Contracts

State Contract 11601 provides services through Ecolights Northwest for the collection, transportation, and disposal of spent lighting, computers and electronic equipment. For information on this contract visit: <https://fortress.wa.gov/ga/inet/servlet/PCAContractDetailSv?contnbr=11601>

### Recycling firms

In many Washington counties, there are firms that collect and recycle spent mercury-containing lamps. Some companies offer mail back kits. These Pacific Northwest vendors provide recycling services:

EcoLights Northwest	9411 8 <sup>th</sup> Ave S, Seattle, WA 98108 (206) 343-1247 <a href="http://www.ecolights.com">www.ecolights.com</a>
Emerald Services	9010 E. Marginal Way S, Seattle, WA 98108 (206) 832-3000 <a href="http://www.emeraldncw.com">www.emeraldncw.com</a>
Grainger	4930 3 <sup>rd</sup> Ave S., Seattle, WA 98134 (206)767-4500 <a href="http://www.grainger.com/Grainger/wwg">www.grainger.com/Grainger/wwg</a>
Safety-Kleen	3210 C Street, Auburn, WA 98002 (253)939-2022 <a href="http://www.safety-kleen.com">www.safety-kleen.com</a>

- Ecology's Hazardous Waste Service Directory provides websites for other companies that recycle mercury. [www.ecy.wa.gov/apps/hwtr/hwsd/](http://www.ecy.wa.gov/apps/hwtr/hwsd/)
- The National Electrical Manufacturers Association offers detailed recycling information provided by lamp manufacturers at [www.lamprecycle.org](http://www.lamprecycle.org)

### Household Hazardous Waste Sites

Some county household-hazardous-waste sites allow businesses to drop off small quantities of spent mercury-containing lamps for recycling.

For managing products with mercury at King County's local hazardous waste sites visit: [www.govlink.org/hazwaste/house/disposal/AnyProduct.cfm?entityID=922&catID=935](http://www.govlink.org/hazwaste/house/disposal/AnyProduct.cfm?entityID=922&catID=935)

To learn more about Clark County's Household Hazardous Waste program visit: [www.clark.wa.gov/recycle/waste](http://www.clark.wa.gov/recycle/waste)

The City of Spokane has a recycling hotline and information on managing household hazardous waste. [www.spokanecitysolidwaste.com/spokanecitysolidwaste/sub.aspx?id=4668](http://www.spokanecitysolidwaste.com/spokanecitysolidwaste/sub.aspx?id=4668)

*If you need this information in an alternate format, please call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.*